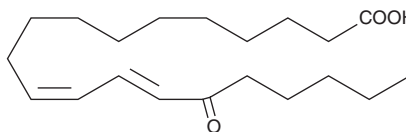


PRODUCT INFORMATION



15-OxoEDE Item No. 37730

CAS Registry No.: 105835-44-7
Formal Name: 15-oxo-11Z,13E-eicosadienoic acid
Synonym: 15-KEDE
MF: C₂₀H₃₄O₃
FW: 322.5
Purity: ≥95%
UV/Vis.: λ_{max}: 234 nm
Supplied as: A solution in ethanol
Storage: -80°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

15-OxoEDE is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 15-OxoEDE in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 15-OxoEDE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 15-OxoEDE in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

15-OxoEDE is produced by the oxidation of 15-HEDE. 15-OxoEDE inhibits 5-LO from RBL-1 cells with an IC₅₀ of 55 μM, which is about 2-fold lower than 15(S)-HEDE.¹ A related oxo-eicosanoid, 5-oxoETE, is biosynthesized from 5(S)-HETE by a specific dehydrogenase and has potent inflammatory activity.²

References

1. Haviv, F., Ratajczyk, J.D., DeNet, R.W., *et al.* Structural requirements for the inhibition of 5-lipoxygenase by 15-hydroxyeicosa-5,8,11,13-tetraenoic acid analogues. *J. Med. Chem.* **30(2)**, 254-263 (1987).
2. Powell, W.S., Gravelle, F., and Gravel, S. Metabolism of 5(S)-hydroxy-6,8,11,14-eicosatetraenoic acid and other 5(S)-hydroxyeicosanoids by a specific dehydrogenase in human polymorphonuclear leukocytes. *J. Biol. Chem.* **267(27)**, 19233-19241 (1992).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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